

Supplementary File 1

Table 1: Sites for the PLACID trial

S.No	Name	Public/private hospital	Level of health care	Total Number
1.	Madras Medical College, Chennai, Tamil Nadu	Public	Tertiary	49
2.	Sawai Man Singh Medical College, Jaipur, Rajasthan	Public	Tertiary	44
3.	Sir H. N. Reliance Foundation Hospital and Research Centre, Mumbai, Maharashtra	Private	Tertiary	33
4.	Sri Aurobindo Institute of Medical Sciences, Indore, Madhya Pradesh	Private	Tertiary	30
5.	Smt. NHL Municipal Medical College, Ahmedabad, Gujarat	Public	Tertiary	27
6.	TN Medical College & BYL Nair Hospital, Mumbai, Maharashtra	Public	Tertiary	27
7.	Gandhi Medical College, Secunderabad, Telangana	Public	Tertiary	26
8.	Government Institute of Medical Sciences, Gr.Noida, Uttar Pradesh	Public	Tertiary	24
9.	Gandhi Medical College, Bhopal, Madhya Pradesh	Public	Tertiary	21
10.	ABVIMS & Ram Manohar Lohia Hospital, New Delhi	Public	Tertiary	20
11.	Satguru Partap Singh Hospital, Ludhiana, Punjab*	Private	Tertiary	15
12.	Kasturba Hospital, Mumbai, Maharashtra	Public	Tertiary	15
13.	Rajarshi Chhatrapati Shahu Maharaj Government Medical College and CPR Hospital, Kolhapur, Maharashtra	Public	Tertiary	11
14.	All India Institute of Medical Sciences, Jodhpur, Rajasthan	Public	Tertiary	11
15.	Postgraduate Institute of Medical Education and Research, Chandigarh	Public	Tertiary	10
16.	All India Institute of Medical Sciences, Patna, Bihar	Public	Tertiary	10
17.	B.J. Medical College, Pune, Maharashtra	Public	Tertiary	8
18.	ESIC Medical College, Faridabad, Haryana	Public	Tertiary	8
19.	Smt Kashibai Navale Medical College, Pune, Maharashtra	Private	Tertiary	8
20.	Karnataka Institute of Medical Sciences, Hubballi, Karnataka	Public	Tertiary	7
21.	Lady Hardinge Medical College and SSK Hospitals, New Delhi	Public	Tertiary	6
22.	King George's Medical University, Lucknow, Uttar Pradesh	Public	Tertiary	6
23.	B.J. Medical College and Civil Hospital, Ahmedabad, Gujarat	Public	Tertiary	5
24.	Mahatma Gandhi University of Medical Sciences and Technology, Jaipur, Rajasthan	Private	Tertiary	5
25.	Government Medical College, Surat, Gujarat	Public	Tertiary	4
26.	Gujarat Medical Education & Research Society (GMERS) Medical College and Hospital, Gotri, Vadodara, Gujarat	Private	Tertiary	4
27.	Sumandeep Vidyapeeth & Dheeraj Hospital, Vadodara, Gujarat	Private	Tertiary	4

28.	Sri Venkateswara Institute of Medical Sciences, Tirupati, Andhra Pradesh	Public	Tertiary	4
29.	Kurnool Medical College, Kurnool, Andhra Pradesh	Public	Tertiary	4
30.	Madurai Medical College, Madurai, Tamil Nadu	Public	Tertiary	3
31.	Government Medical College, Bhavnagar, Gujarat	Public	Tertiary	3
32.	Mahatma Gandhi Memorial Medical College, Indore, Madhya Pradesh	Public	Tertiary	3
33.	Poona Hospital and Research Centre, Pune, Maharashtra	Private	Tertiary	3
34.	Super Specialty Paediatric Hospital and Post Graduate Teaching Institute, Noida & SN Medical College, Agra, Uttar Pradesh	Public	Tertiary	2
35.	Christian Medical College, Vellore, Tamil Nadu	Public	Tertiary	1
36.	Aditya Birla Memorial Hospital, Pune, Maharashtra	Private	Tertiary	1
37.	R D Gardi Medical College, Ujjain, Madhya Pradesh	Private	Tertiary	1
38.	Seth G S Medical College and the KEM Hospital, Mumbai, Maharashtra	Public	Tertiary	1
39.	Lokmanya Tilak Municipal Medical College & General Hospital, Mumbai, Maharashtra	Public	Tertiary	1

This site included a group of hospitals: Satguru Partap Singh Hospital, Ludhiana; Government Medical College, Amritsar; Guru Govind Singh Medical College and Hospital, Faridkot; Dayanand Medical College and Hospital, Ludhiana; Government Medical College, Patiala

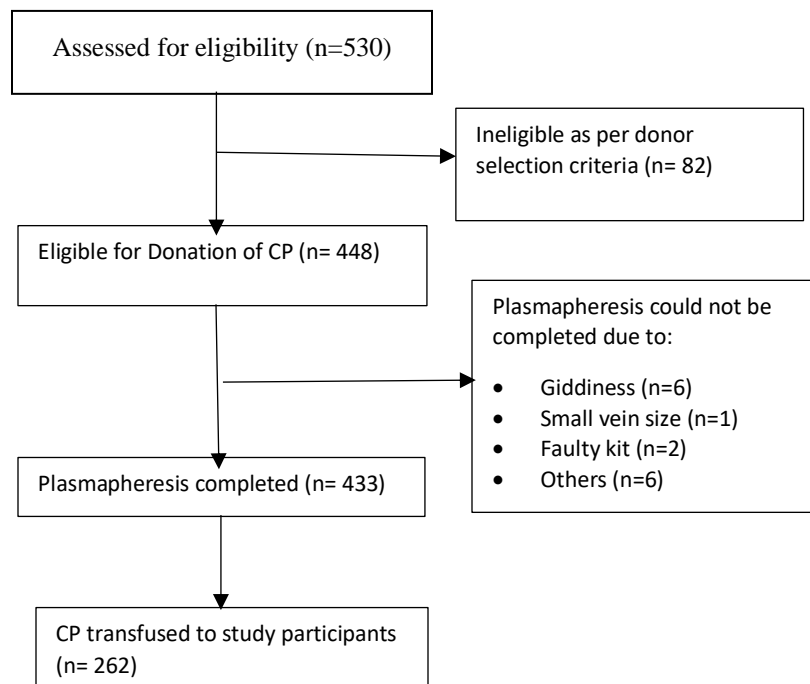
Figure 1: Geographical representation of the study sites across India



Microneutralization Test (MNT)

Micro neutralization test (MNT) was performed in the Biosafety Level-3 facility at ICMR-National Institute of Virology, Pune, Maharashtra. Briefly, the Vero CCL-81-adapted SARS-CoV-2 Indian isolate virus was used in this assay. Two-fold serially diluted sera (initial dilution 1:10 to 1:1280) were incubated with 2-log tissue culture infective dose, 50 percent (TCID₅₀) of the test virus for an hour at 37°C. The test virus antibody mixture was added to a pre-formed monolayer of Vero CCL81 cells in 96-well plates and incubated at 37°C with 5 percent CO₂ for 96 hours. Ten-fold dilution of the virus without antibody (virus control), SARS-CoV-2 positive serum (positive control) with 2 logs TCID₅₀ of SARS-CoV-2 virus and normal non-immune serum (negative control) were added in respective wells as a control in this assay. Neutralizing titer was expressed as the reciprocal of the highest serum dilution at which 50 percent of virus added was neutralized.

Figure 2: Flow of donors for collection and use of convalescent plasma in the trial



CP: Convalescent plasma

Table 2: Demographic and clinical characteristics of the donors who donated the convalescent plasma used in the trial, n=262

	Values
Age in yrs, Median (IQR)	32.5 (27, 39)
Gender, male, n(%)	247 (94.3%)
Blood Group	
A	59 (22.5%)
B	95 (35.3%)
O	73 (27.9%)
AB	34 (12.9%)
Others	1 (0.4%)
Disease Duration in days, Median (IQR)	6 (3,11)
Diagnosis	
Mild (Fever and cough with no oxygen requirement)	245 (94.2%)
Moderate (Fever and cough with oxygen requirement)	15 (5.8%)
Proportion of donors with detectable neutralizing antibodies (titre >1:20)	161 (63.6%)
Neutralizing antibody (NAb) titres among donors with detectable NAb's, median (IQR)	1:40 (1:30, 1:80)

Table 3: Age distribution in intervention and control group

Age (In completed years)	Best Standard of care, n=229	CP+ Best standard of care, n=235
18-30	11 (4.8%)	11 (4.7%)
31-40	46 (20.1%)	38 (16.2%)
41-50	50 (21.8%)	56 (23.8%)
51-60	71 (31%)	77 (32.8%)
>60	51 (22.3%)	53 (22.5%)

CP: Convalescent plasma

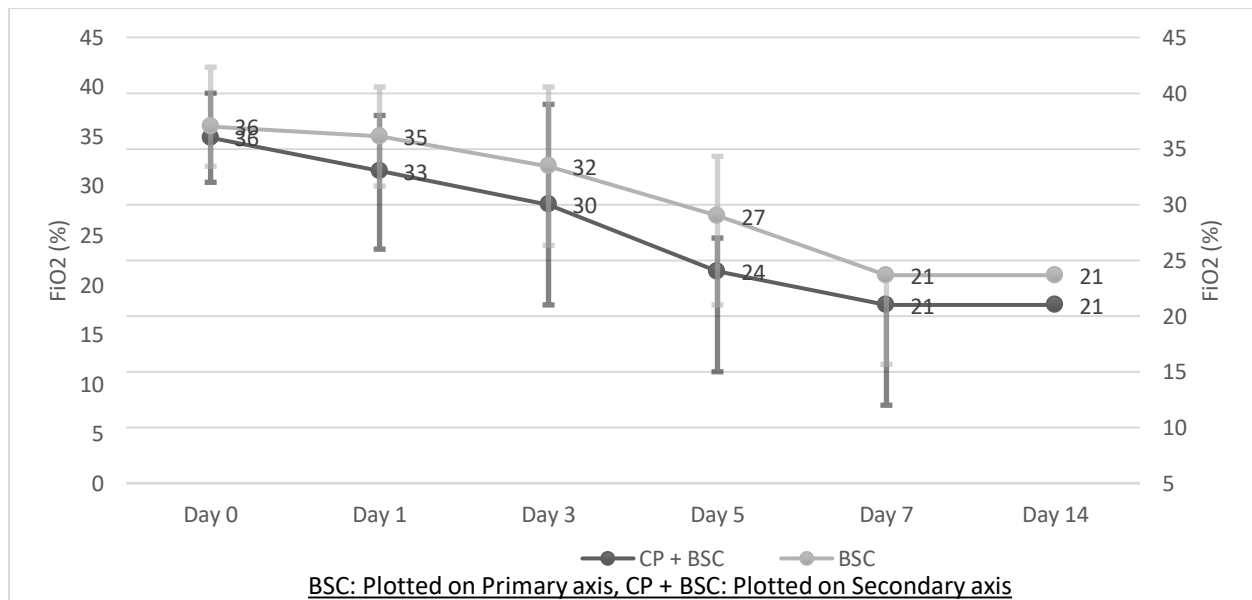
Table 4: Comparison of secondary outcomes between intervention and control arms, per protocol analysis, n=451

	Convalescent Plasma arm,	Basic Standard of Care arm,	Unadjusted risk ratio/ effect size	Adjusted risk ratio
Resolution of shortness of breath on day7, n=362	140/183 (76.5%)	119/181 (65.7%)	1.16 (1.02, 1.32)	1.14 (1.001, 1.3)
Resolution of fever on day7, n =138	66/67 (98.5%)	65/71 (91.5%)	1.08 (0.99, 1.16)	1.07 (0.99, 1.16)
Resolution of cough on day7, n=274	102/127 (80.3%)	111/147 (76.5%)	1.06 (0.94, 1.2)	1.06 (0.94, 1.2)
Resolution of fatigue on day7, n=306	114/156 (73.1%)	92/153 (60.1%)	1.21 (1.02, 1.42)	1.21 (1.03, 1.42)
Negative conversion of SARS-CoV-2 viral RNA on day 3, n=367, n(%)	79/184 (42.9%)	67/183 (36.6%)	1.17 (0.91, 1.51)	1.18 (0.91, 1.51)

Negative conversion of SARS-CoV-2 viral RNA on day 7, n=342, n(%)	117/173 (67.6%)	93/169 (55.0%)	1.23 (1.04, 1.46)	1.22 (1.03, 1.45)
Invasive mechanical ventilation during hospital stay, n(%)	19 (8.4%)	19 (8.5%)	0.99 (0.54, 1.81)	0.99 (0.53, 1.82)
Non-invasive mechanical ventilation during hospital stay, n(%)	31(13.7%)	37 (16.5%)	0.83 (0.53, 1.28)	0.83 (0.54, 1.29)
Vasopressor support after enrolment, n (%)	10/225 (4.4%)	8/221 (3.6%)	1.23 (0.49, 3.05)	1.22 (0.49, 3.05)

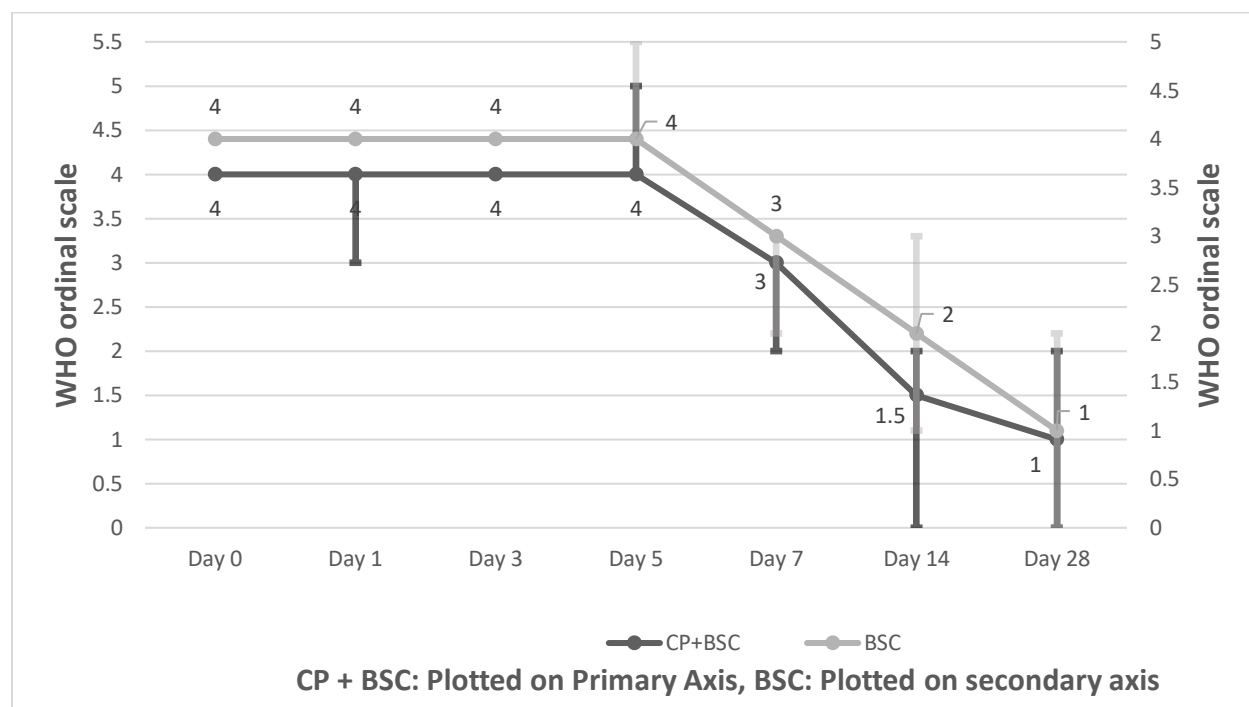
Adjustment made for trial sites and presence of diabetes mellitus.

Figure 3: Comparison of oxygen requirement (FiO₂) between intervention (CP+BSC) and control (BSC) arm, by days post enrolment



FiO₂: fraction of inspired oxygen, expressed as percentage; the graph shows median with interquartile ranges. Day 0: Day of enrolment; CP: Convalescent plasma; BSC: Best standard of care

Figure 4: Comparison of WHO ordinal scale between intervention (CP+BSC) and control (BSC) arm, by days post enrolment



Day 0: Day of enrolment; CP: Convalescent plasma; BSC: Best standard of care; Values depicted are the median scores with interquartile range as error bars.